



In the Claims

This listing of claims replaces all prior versions, and listings, of claims in the application:

1. (Cancelled).
2. (Previously Presented): The medical device of claim 21 further including a sheath having a sheath lumen through which the catheter is selectively moved.
3. (Previously Presented): The medical device of claim 2 further including means for selectively restricting relative movement between the sheath and the catheter.
4. (Previously Presented): The medical device of claim 21 further including a driver for selectively moving the needle with one or more of a predefined force, a predefined acceleration and a predefined velocity to penetrate the body tissue.
5. (Previously Presented): The medical device of claim 4 wherein the driver selectively rotates the needle.
6. (Previously Presented): The medical device of claim 21 further including a sensor on the device for providing signals for determining position of the device.
7. (Previously Presented): The medical device of claim 6 wherein the sensor is on the needle.
8. (Previously Presented): The medical device of claim 21 that further includes an internal passage in communication with the first port and further including a second port in fluid communication with the internal passage and the first port to retrieve the biopsy material from the first port.
9. (Cancelled).
10. (Previously Presented): The medical device of claim 22 further including a sheath having a sheath lumen through which the catheter is selectively moved.
11. (Previously Presented): The medical device of claim 10 further including means for selectively restricting relative movement between the sheath and the catheter.
12. (Previously Presented): The medical device of claim 22 further including a driver for selectively moving the needle with one or more of a predefined force, a predefined acceleration and a predefined velocity to penetrate the material.

13. (Previously Presented): The medical device of claim 12 wherein the driver selectively rotates the needle.

14. (Previously Presented): The medical device of claim 22 further including a sensor on the device for providing signals for determining position of the device.

15. (Previously Presented): The medical device of claim 14 wherein the sensor is on the needle.

16. (Previously Presented): The medical device of claim 22 further including a second port in fluid communication with the first port and a supply of the fluid.

17. (Currently Amended): A medical device for taking a biopsy of material, the medical device comprising:

- a catheter having a catheter lumen with a proximal end and a distal end;

- a needle with a solid pointed end for insertion into a body material, an internal passage, and a port in fluid communication with the internal passage for receiving biopsy material, the needle for selectively moving to (a) extend from the distal end of the catheter lumen to a first position wherein the pointed end and port are inserted into the body material to take the biopsy and (b) retract to a second position wherein at least the port is positioned within the catheter lumen;

- a sheath having a sheath lumen through which the catheter is selectively moved; and

- a driver for selectively moving the needle with one or more of a predefined force, a predefined acceleration and a predefined velocity to penetrate the material.

18. (Previously Presented): The medical device of claim 17 further including means for selectively restricting relative movement between the sheath and the catheter.

19. (Previously Presented): A medical device for injecting a fluid into a body material, the medical device comprising:

- a catheter having a catheter lumen with a proximal end and a distal end;

- a needle having a side wall, a solid tip, an internal passage, and a port in fluid communication with the internal passage formed in the side wall, the needle for selectively moving (a) to extend from the distal end of the catheter lumen to a first position to inject the fluid into the body material through the port in the side wall, and (b) retract to a second position within the catheter lumen;

a sheath having a sheath lumen through which the catheter is selectively moved; and

a driver for selectively moving the needle with one or more of a predefined force, a predefined acceleration and a predefined velocity to penetrate the material.

20. (Previously Presented): The medical device of claim 19 further including means for selectively restricting relative movement between the sheath and the catheter.

21. (Previously Presented): A medical device including a catheter for taking a biopsy of body tissue, the catheter comprising:

a catheter lumen; and

a needle having an outer surface, a solid pointed end for insertion into body tissue, an internal passage, and a first port in fluid communication with the internal passage open to the outer surface, the needle movable from a first position to a second position, the first port being positioned in the catheter lumen when the needle is in the first position and being positioned outside of the catheter lumen when the needle is in the second position, wherein when the catheter is used the pointed end and first port are inserted into the body tissue when the needle is moved into the second position in order to collect biopsy material from the body tissue.

22. (Previously Presented): A medical device for injecting a fluid into a material, the medical device comprising:

a catheter having a catheter lumen; and

a needle having an outer sidewall, a solid pointed end for insertion into body tissue, a first port open to the outer side wall, and an internal passage in communication with the port, wherein the pointed end and port are inserted into the body tissue and fluid is injected into the body tissue through the port.